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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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DLA PIPER US LLP 2000 UNIVERSITY AVENUE E. PALO ALTO, CA 94303-2248			EXAMINER LONG, PONYA M	
			ART UNIT 4127	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/623,352

**Applicant(s)**

YADAV-RANJAN, RANI

**Examiner**

FONYA LONG

**Art Unit**

4127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-893)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

This communication is a first Office Action Non-Final rejection on the merits.

Claims 1-23, as originally filed, are currently pending and have been considered below.

#### ***Claim Objections***

1. Claims 1 and 11 are objected to because of the following informalities: The claim structure is improper. The word "A" should be in lower-case form in order to form a proper sentence. Appropriate correction is required.
2. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim. In this case claims 9 and 19 contain multiple sentences. A proper claim must be one sentence. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Flynn (WO 02/23443).

**As per Claims 1 and 11**, Flynn discloses a system for providing a contractor risk assessment score (CRAS) (Pages 13-16, discloses providing raw scores for various risk assessments (character, financial, property, legal, and project)), comprising: a memory for storing data (Page 9, Para. 1, discloses a computer having storage comprising hard disk drives or other memory storage devices); a computer coupled to said memory (Page 9, Para. 1, discloses a computer having storage comprising hard disk drives or other memory storage devices); and a program in execution by said computer (Page 9, Para. 1, discloses program modules being integrated and interacting with each other via the computer), said program comprising a formula comparing variables predictive of a performance of a contractor (Page 16, Para. 1, discloses a program comparing the adjusted risk assessment raw scores with the underwriting standards to determine whether the applicant's risk is acceptable).

**As per Claims 2 and 12**, Flynn discloses a contractor risk assessment score (CRAS) equaling  $[\varepsilon(A_i) / \varepsilon(M_i) * 100]$  (Pages 13-15, discloses providing a raw score for each risk assessment used for determining whether to provide a construction loan to a contractor).

**As per Claims 3 and 13**, Flynn discloses the contractor is a construction contractor (Page 8, Para. 1, discloses reducing the risk in loans to contractors for construction projects).

**As per Claims 4 and 14**, Flynn discloses a formula that determines a sum of assigned scores on said variables (Page 16, Para. 1, discloses providing a total of all the adjusted risk assessment raw scores).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6, 8, 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn (WO 02/23443) in view of Chandak et al. (US 2003/0105689).

**As per Claims 5 and 15**, Flynn discloses the claimed invention as applied to Claims 4 and 14, above. However, Flynn fails to explicitly disclose variables comprising a payment history value and a credit history value.

Chandak et al. discloses a method and system for determining whether to issue a reward incentive credit card to a customer based on a risk value associated with the customer with the concept of variables comprising a payment history value based on payments by the contractor and a credit history value of the contractor ([0027] discloses determining a customer's financial risk value based on past payment history data and credit history information).

Therefore, from the teaching of Chandak et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include variables comprising a payment history value and a credit history value as taught by Chandak et al. in order to aid in predicting a contractor's behavior based on past occurrences.

**As per Claims 6 and 16**, Flynn discloses the claimed invention as applied to Claims 5 and 15, above. However, Flynn fails to explicitly disclose variables comprising a value for an amount owed in debt.

Chandak et al. discloses a method and system for determining whether to issue a reward incentive credit card to a customer based on a risk value associated with the customer with the concept of variables comprising a value for an amount owed in debt by the contractor ([0027] discloses determining a customer's financial risk value based on the customer's debts).

Therefore, from the teaching of Chandak et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include variables comprising a value for an amount owed in debt as taught by Chandak et al. in order to aid determining a contractor's ability to perform according to the loan requirements, if provided a loan.

**As per Claims 8 and 18**, Flynn discloses the variables comprising at least one predefined criterion selected from the group consisting of: length-of-license, Cumulative-total-of-engagements, number-of-Notice-of-completions, Number-of-terminations, Current-engagements, Insurance-held divided by Total-value-of-engagement, Company-structure, number-of-employees, years-in-trade, number-of-liens, Number-of-banks-used, Terminations divided by Years-in-trade, Terminations divided by Total-Engagements, Delays divided by Total-Engagements, Number-of-Tax-Liens, Age-of-Contractor, License-Type, License-Status, Repeat Business-with-Bank, Average-size-

of-Engagement, Judgments, and Judgments-satisfied (Page 14, Para. 1, discloses analyzing judgments and liens when conducting a risk assessment).

7. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn (WO 02/23443) in view of Chandak et al. (US 2003/0105689), as applied to Claims 5 and 15 above, and in further view of Chen (US 2003/0225651).

The Flynn and Chandak et al. combination discloses the claimed invention. However, the combination fails to explicitly disclose the variables comprising at least a Risk Assessment metric or a length of time since a transmitted alert.

Chen discloses a method for generating fulfillment value at risk scores and assessing the stability of the fulfillment value at risk scores with the concept of the variables comprising at least one predefined criterion selected from the group consisting of: a Risk Assessment metric having changed by at least a predetermined amount and a length of time since a transmitted alert ([0013] discloses data being aggregated over predetermined periods of time (e.g., daily, weekly, monthly) by item to create location value scores to generate risk scores that provides a measure of risk assessment).

Therefore, from the teaching of Chen, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Flynn and Chandak et al. combination to include variables comprising at least a Risk Assessment metric or a length of time since a transmitted alert as taught by Chen in order to provide a standardized period of time to collect a contractor's historical data when conducting a risk assessment.

8. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn (WO 02/23443) in view of Lewis (6,513,019).

Flynn discloses the claimed invention as applied to Claims 1 and 11. However, Flynn fails to explicitly disclose a score history report.

Lewis discloses a system that enables financial institutions to rationalize risk in a cost-efficient manner with the concept of a score history report generated on a unique desired variable such as months (Col. 21, Lines 63-67; Col. 22, Lines 1-22, discloses enabling a user to enter historical reports as of a specific data and time or across a historical period (i.e. daily, weekly, monthly, quarterly, annually)).

Therefore, from the teaching of Lewis, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include a score history report as taught by Lewis in order evaluate the financial history of a contractor over a period of time.

9. Claims 10, 20, 21, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn (WO 02/23443) in view of Zizzamia et al. (US 2004/0054553).

**As per Claims 10 and 20**, Flynn discloses the claimed invention as applied to Claims 1 and 11, above. However, Flynn fails to explicitly disclose a formula that generates a score using multivariate methods to produce a coefficient for an external variable.

Zizzamia et al. discloses a system and method to predict future profitability and productivity of licensed professionals with the concept of a formula generating a score



using multivariate methods to produce a coefficient for an external variable and the coefficient represents the contribution the external variable to the CRAS ([0027] discloses using multivariate methods [0081] which provides a correlation coefficient for each of the predictive external variables).

Therefore, from the teaching of Zizzamia et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include a formula that generates a score using multivariate methods to produce a coefficient for an external variable as taught by Zizzamia et al. in order to aid in predicting future behavior of the contractor.

**As per Claim 21**, Flynn discloses the claimed invention as applied to Claim 11, above. However, Flynn fails to explicitly disclose examining external variables for cross-correlation against one another.

Zizzamia et al. discloses a system and method to predict future profitability and productivity of licensed professionals with the concept of examining external variables for cross-correlation against one another to validate the external variables ([0079] discloses predictor variables from the various external data sources are examined for cross-correlations).

Therefore, from the teaching of Zizzamia et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include examining

external variables for cross-correlation against one another as taught by Zizzamia et al. in order to eliminate highly repetitive variables.

**As per Claim 22**, Flynn discloses the claimed invention as applied to Claim 21, above. However, Flynn fails to explicitly disclose associating an external variable with an individual contractor's records.

Zizzamia et al. discloses a system and method to predict future profitability and productivity of licensed professionals with the concept of associating at least one individual external variable with an individual contractor's records based on a data key associated with at least one external data source ([0046] discloses variables from external data sources are matched to producer data to identify a relationship between the variables and insurance producer productivity).

Therefore, from the teaching of Zizzamia et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include associating an external variable with an individual contractor's records as taught by Zizzamia et al. in order to aid in developing a method that is predictive a contractor's ability to perform.

**As per Claim 23**, Flynn discloses the claimed invention as applied to Claim 11, above. However, Flynn fails to explicitly disclose dividing the data into a relational data set.

Zizzamia et al. discloses a system and method to predict future profitability and productivity of licensed professionals with the concept of dividing the data into a relational data set for developing the score for refining and validating the data ([0085-

0089] discloses developing a testing data set that provides the relationships in the data).

Therefore, from the teaching of Zizzamia et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for producing reduced risk loans using assessment of Flynn to include dividing the data into a relational data set as taught by Zizzamia et al. in order to monitor and minimize the overstating of the relationships in the data.

***Requirement for Information under 37 C.F.R. § 1.105***

10. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

Specifically, the Examiner would like to know if there is any information used to derive the formula  $CRAS = [\epsilon(A_i) / \epsilon(M_i) * 100]$ . Examiner is requesting a copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used in the invention process, such as by designing around or providing a solution to accomplish an invention result.

The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this

requirement and any information disclosures beyond the scope of this requirements under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

This requirement is an attachment of the enclosed Office Action. A complete reply to the enclosed Office Action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the with the time period for reply to the enclosed Office Action.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Basch et al. (6,119,103) discloses a method for predicting financial risk.

Karmali (US 2002/0147676) discloses a system for determine the range of investment risks based on identifying and quantifying the collective impact of critical business risks.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FONYA LONG whose telephone number is (571)270-

5096. The examiner can normally be reached on Mon/Fri [7:30am/5:00pm EST] with First Fri. Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on (571) 270-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FML

/Lynda Jasmin/

Supervisory Patent Examiner, Art Unit 4127

